What is claimed is:

1.   A transmitting apparatus comprising:

a contents information storing part for storing a list of attributes preset for each contents; and

a basic schedule creating part for creating a basic schedule as a model schedule for repeatedly transmitting contents on the basis of contents information stored in the contents information storing part,

wherein a basic schedule for assuring repeated transmission of contents even when the actual size of the contents is changed is created.

2.   The transmitting apparatus according to claim 1, further comprising:

a basic schedule storing part for storing a basic schedule;

a broadcast schedule creating part for creating a broadcast schedule from the basic schedule;

a broadcast schedule storing part for storing the broadcast schedule;

a contents storing part for storing contents; and

a transmitting part for transmitting the broadcast schedule and contents in accordance with the broadcast schedule,

wherein the broadcast schedule creating part creates a broadcast schedule from the basic schedule stored in the basic schedule storing part, stores the broadcast schedule into the broadcast schedule storing part, and

wherein said transmitting part transmits the broadcast schedule and contents stored in the contents storing part.

3.   The transmitting apparatus according to claim 1, wherein said basic schedule creating part sets a schedule for force start for transmitting a series for force start which always matches with a start condition of a receiving apparatus into the basic schedule.

4.   The transmitting apparatus according to claim 3, wherein said basic schedule creating part determines contents to be transmitted in the same series in accordance with a contents grouping condition and creates a basic schedule.

5.   The transmitting apparatus according to claim 4, wherein said contents grouping condition is that contents attributes are the same.

6.   The transmitting apparatus according to claim 5, wherein said contents attribute is an update frequency.

7.   The transmitting apparatus according to claim 5, wherein said contents attribute is a billing attribute.

8.   The transmitting apparatus according to claim 5, wherein said contents attribute is a copy control attribute.

9.   The transmitting apparatus according to claim 5, wherein

said contents attribute is filtering information which is receiver information or user information set for each receiving apparatus or each user.

10. The transmitting apparatus according to claim 9, wherein said filtering information is area information.

11. The transmitting apparatus according to claim 4, wherein said contents grouping condition is not to exceed a total of maximum sizes or longest transmission time of contents to be transmitted in a series.

12. The transmitting apparatus according to claim 4, wherein when said basic schedule creating part assigns contents having the same contents attribute to a plurality of series, said broadcast schedule creating part creates a broadcast schedule so as to transmits the series in successive time at the time of creating a broadcast schedule.

13. The transmitting apparatus according to claim 2, further comprising an urgent change schedule setting part for setting a schedule for urgent change in said basic schedule, wherein in preparation for a case where a contents to be urgently changed occurs, the urgent change schedule setting part presets a schedule for urgent change for transmitting an urgent change contents into the basic schedule.

14. The transmitting apparatus according to claim 13,

further comprising a contents registering part for registering
a contents, wherein when a contents to be transmitted is
registered into the contents registering part after creating
a broadcast schedule, the basic schedule creating part assigns
the contents so as to be transmitted in accordance with the
schedule for urgent change.

15.   The transmitting apparatus according to claim 3, wherein
when a contents to be urgently updated is stored in said contents
storing part, said broadcast schedule creating part re-creates
a broadcast schedule so as to indicate updating of the contents
in a schedule for broadcasting the contents after transmission
end time corresponding to said schedule for force start which
is the closest.

16.   The transmitting apparatus according to claim 2, further
comprising a dummy contents schedule setting part for setting
a contents deletion schedule to said basic schedule for
transmitting a dummy contents for instructing deletion of the
contents, wherein in the case of deleting a setting of a contents
in contents information, a dummy contents for instructing the
receiving apparatus to delete the contents whose setting is
deleted is assigned in a basic schedule so as to be transmitted
in a schedule for deleting contents.

17.   A transmitting apparatus comprising:
       a contents information storing part for storing contents
information;

a contents storing part for storing contents;

a presentation expiry assigning part for assigning presentation expiry in a receiving apparatus to the contents; and

a transmitting part for transmitting a contents,

wherein contents are transmitted while extending the presentation expiry assigned to the contents.

18. A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein

a transmitting apparatus for transmitting data comprises:

a contents registering part for registering contents;

a contents information storing part for storing contents information;

a basic schedule creating part for creating a basic schedule used for creating a broadcast schedule; and

an urgent change schedule setting part for setting a schedule for urgent change in the basic schedule, and

when said contents registering part determines whether updating of registered contents is urgent or not by using the contents information of the contents and, if the contents updating is urgent, notifies said broadcast schedule creating part of the fact, and said broadcast schedule creating part re-creates a broadcast schedule in response to the notification of said contents registering part.

19.   A data broadcast scheduling method for transmitting/receiving data by using a transmission path, wherein

a transmitting apparatus for transmitting data comprises:

a contents registering part for registering contents;

a contents information storing part for storing contents information;

a basic schedule creating part for creating a basic schedule used for creating a broadcast schedule; and

an urgent change schedule setting part for setting a schedule for urgent change in the basic schedule, and

said contents registering part determines whether updating of registered contents is urgent or not by using the contents information of the contents and, if the contents updating is urgent, notifies said broadcast schedule creating part of the fact, and said broadcast schedule creating part re-creates a broadcast schedule in response to the notification of said contents registering part.

20.   A recording medium in which a data broadcast scheduling program for transmitting/receiving data by using a transmission path is recorded, wherein

a transmitting apparatus for transmitting data comprises:

a contents registering part for registering contents;

a contents information storing part for storing contents information;

a basic schedule creating part for creating a basic schedule used for creating a broadcast schedule; and

an urgent change schedule setting part for setting a schedule for urgent change in the basic schedule, and

when said contents registering part determines whether updating of registered contents is urgent or not by using the contents information of the contents and, if the contents updating is urgent, notifies said broadcast schedule creating part of the fact, and said broadcast schedule creating part re-creates a broadcast schedule in response to the notification of said contents registering part.

21.   A data broadcast scheduling program for transmitting/receiving data by using a transmission path, wherein

a transmitting apparatus for transmitting data comprises:

a contents registering part for registering a contents;

a contents information storing part for storing contents information;

a basic schedule creating part for creating a basic schedule used for creating a broadcast schedule; and

an urgent change schedule setting part for setting a schedule for urgent change in the basic schedule, and

when said contents registering part determines whether updating of registered contents is urgent or not by using the contents information of the contents and, if the contents updating is urgent, notifies said broadcast schedule creating

part of the fact, and said broadcast schedule creating part re-creates a broadcast schedule in response to the notification of said contents registering part.

22.   A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein

a transmitting apparatus for transmitting data transmits vacancy data indicating that a directory for managing data is vacant and

a receiving apparatus for receiving data transmitted from said transmitting apparatus has a data deleting part for, when said vacancy data is received from said transmitting apparatus, automatically deleting a directory corresponding to said vacancy data.

23.   The data broadcast scheduling system according to claim 22, wherein the data deleting part of said receiving apparatus deletes said directory when said data managed by said directory does not exist.

24.   The data broadcast scheduling system according to claim 22, wherein said transmitting apparatus sets the name of a directory to be deleted in said vacancy data.

25.   The data broadcast scheduling system according to claim 24, wherein when the vacancy data in which the name of a directory to be deleted is set is received, said receiving

apparatus checks whether or not there is a user who is referring to the data under said directory name before the data under said directory name is deleted.

26. The data broadcast scheduling system according to claim 22, wherein said transmitting apparatus assigns data presentation period data indicative of a data presentation period in said receiving apparatus to said data to be transmitted and transmits the resultant to said receiving apparatus.

27. The data broadcast scheduling system according to claim 26, wherein said receiving apparatus has a presentation period determining part for receiving said data presentation period data and determines whether data can be presented or not by using present time data indicative of the present time and said data presentation period data.

28. A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein a receiving apparatus for receiving data has a data deleting part, when vacancy data indicating that a directory for managing data is vacant is received, for automatically deleting a directory corresponding to said vacancy data.

29. A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein a transmitting apparatus for transmitting data

comprises: a download data control data generating part for generating download data control data which includes operation information of download data in a receiving apparatus for receiving data from the transmitting apparatus,

said download data control data including module number data indicative of the number of data received by said receiving apparatus and directory path name data indicative of a path name of a directory for managing data in said receiving apparatus; and

a transmitting part, in the case of deleting an arbitrary directory in said receiving apparatus, for setting said module number data in said download data control data corresponding to said directory to 0, transmitting the resultant to said receiving apparatus, and transmitting no data corresponding to said directory, and

said receiving apparatus has a data deleting part for monitoring whether data corresponding to said module number data is received or not for predetermined time when the download data control data in which said module number data is 0 is received from said transmitting apparatus and, if the data is not received, deleting said data of said directory corresponding to said module number data.

30.   A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein a transmitting apparatus for transmitting data comprises: a download data control data generating part for generating download data control data which includes operation

information of download data in a receiving apparatus for receiving data from the transmitting apparatus,

said download data control data including module number data indicative of the number of data received by said receiving apparatus and directory path name data indicative of a path name of a directory for managing data in said receiving apparatus, and

a transmitting part, in the case of deleting an arbitrary directory in said receiving apparatus, for setting said module number data of said download data control data corresponding to said directory to 0, transmitting the resultant to said receiving apparatus, and transmitting no data corresponding to said directory.

31. A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein a receiving apparatus for receiving data comprises a data deleting part, when download data control data indicative of operation information of download data in said receiving apparatus for receiving data transmitted from a transmitting apparatus in which module number data indicative of the number of data received by said receiving apparatus is 0 is received from said transmitting apparatus for transmitting data to aid receiving apparatus, for monitoring whether data corresponding to said module number data is received or not for predetermined time and, if the data is not received, for deleting data of a directory for managing data in said receiving apparatus corresponding to said module number data.

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32.   A data broadcast scheduling method for transmitting/receiving data by using a transmission path, comprising the steps of:

generating download data control data which includes operation information of download data in a receiving apparatus for receiving data from a transmitting apparatus for transmitting data in the transmitting apparatus;

setting module number data indicative of the number of data received by said receiving apparatus and directory path name data indicative of a path name of a directory for managing data in said receiving apparatus to said download data control data;

setting said module number data in said download data control data corresponding to said directory to 0 and transmitting the resultant data to said receiving apparatus at the time of deleting an arbitrary directory in said receiving apparatus; and

transmitting no data corresponding to said directory.

33.   A data broadcast scheduling method for transmitting/receiving data by using a transmission path, comprising the steps of:

monitoring whether data corresponding to module number data indicative of the number of data received by a receiving apparatus for receiving data is received or not for a predetermined time, when download data control data which indicates operation information of download data in said

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receiving apparatus for receiving data from a transmitting apparatus for transmitting data to said receiving apparatus, in which said module number data is 0 is received from the transmitting apparatus in said receiving apparatus; and

when the data is not received, deleting said data in a directory for managing data in said receiving apparatus, which corresponds to said module number data.

34.   A recording medium in which a data broadcast scheduling program for transmitting/receiving data by using a transmission path is recorded, the program comprising the steps of:

monitoring whether data corresponding to module number data indicative of the number of data received by a receiving apparatus for receiving data is received or not for a predetermined time, when download data control data which indicates operation information of download data in said receiving apparatus for receiving data from a transmitting apparatus for transmitting data to said receiving apparatus, in which said module number data is 0, is received from the transmitting apparatus in said receiving apparatus; and

when the data is not received, deleting said data in a directory for managing data in said receiving apparatus, which corresponds to said module number data.

35.   A data broadcast scheduling program for transmitting/receiving data by using a transmission path, comprising the steps of:

monitoring whether data corresponding to module number data indicative of the number of data received by a receiving apparatus for receiving data is received or not for a predetermined time, when download data control data which indicates operation information of download data in said receiving apparatus for receiving data from a transmitting apparatus for transmitting data to said receiving apparatus, in which said module number data is 0 is received from said transmitting apparatus, in said receiving apparatus; and

when the data is not received, deleting said data in a directory for managing data in said receiving apparatus, which corresponds to said module number data.

36. A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein a transmitting apparatus for transmitting data comprises: a download data control data generating part for generating download data control data which includes operation information of download data in a receiving apparatus for receiving data from the transmitting apparatus,

said download data control data including module number data indicative of the number of data received by said receiving apparatus and directory path name data indicative of a path name of a directory for managing data in said receiving apparatus; and

a transmitting part, at the time of deleting an arbitrary directory in said receiving apparatus, for setting said module number data in said download data control data corresponding

to said directory to 0, transmitting the resultant to said receiving apparatus, and transmitting no data corresponding to said directory, and

said receiving apparatus has a data deleting part, when the download data control data in which said module number data is 0 is received from said transmitting apparatus, for deleting said data of said directory corresponding to said module number data.

37. A data broadcast scheduling system for transmitting/receiving data by using a transmission path, wherein a receiving apparatus for receiving data has a data deleting part, when download data control data indicative of operation information of download data in said receiving apparatus for receiving data transmitted from said transmitting apparatus in which data of the number of modules indicative of the number of data received by said receiving apparatus is 0 is received from said transmitting apparatus for transmitting to said receiving apparatus, for deleting data of a directory for managing data in said receiving apparatus corresponding to said module number data.

38. A data broadcast scheduling method for transmitting/receiving data by using a transmission path, comprising a step, when download data control data indicative of operation information of download data in a receiving apparatus for receiving data transmitted from a transmitting apparatus for transmitting data to said receiving apparatus,

in which module number data indicative of the number of data received by said receiving apparatus is 0 is received from said transmitting apparatus, of deleting data of a directory for managing data in said receiving apparatus corresponding to said module number data.

39. A recording medium in which a data broadcast scheduling program for transmitting/receiving data by using a transmission path is recorded, the program comprising a step, when download data control data indicative of operation information of download data in a receiving apparatus for receiving data transmitted from a transmitting apparatus for transmitting data to said receiving apparatus, in which module number data indicative of the number of data received by said receiving apparatus is 0 is received from said transmitting apparatus, of deleting data of a directory for managing data in said receiving apparatus corresponding to said module number data.

40. A data broadcast scheduling program for transmitting/receiving data by using a transmission path, the program for allowing a computer to execute a step, when download data control data indicative of operation information of download data in a receiving apparatus for receiving data transmitted from a transmitting apparatus for transmitting data to said receiving apparatus, in which module number data indicative of the number of data received by said receiving apparatus is 0, is received from said transmitting apparatus,

of deleting data of a directory for managing data in said receiving apparatus corresponding to said module number data.

41.   A data receiving apparatus comprising:

a receiving part for receiving a transmission broadcast schedule and contents transmitted from a transmitting apparatus having a broadcast schedule creating function;

a broadcast schedule storing part for storing the broadcast schedule;

a presetting part for presetting reception to start the receiving part;

a content storing part for storing received contents; and

a contents display part for displaying the contents,

wherein said presetting part presets reception in the receiving part on the basis of the broadcast schedule stored in the broadcast schedule storing part, and the display part calls and displays contents from the contents storing part.

42.   A data receiving apparatus comprising:

a receiving part for receiving data, download data control data, and a transmission schedule transmitted from a transmitting apparatus having a transmission schedule creating function;

a transmission schedule storing part for storing the received transmission schedule;

a reception presetting part for determining reception time of updated data from information indicating updating of

data added to the transmission schedule and starting the receiving part;

a data storing part for storing the received data;

a storage/deletion determining part for determining whether the data is to be stored or deleted from the received download data control data;

a data display part for accepting the received data and displaying desired data;

a data deleting part for deleting data from the data storing part, the data determined to be deleted by the storage/deletion determining part; and

a data presentation period determining part for determining whether data can be displayed or not on the basis of a data presentation period and present time at the time of displaying data, and

wherein said presetting part presets reception in the receiving part on the basis of the transmission schedule stored in the transmission schedule storing part, the display part calls and displays contents from said data storing part and

said data receiving apparatus further comprises a data deleting part, when download data control data indicative of operation information of download data in a receiving apparatus for receiving data from said transmitting apparatus in which module number data indicative of the number of data received by said receiving apparatus is 0 is received, for deleting data of a directory for managing data in said receiving apparatus.

43. A data receiving apparatus comprising:

a receiving part for receiving data, download data control data, and a transmission schedule transmitted from a transmitting apparatus having a transmission schedule creating function;

a transmission schedule storing part for storing the received transmission schedule;

a reception presetting part for determining reception time of updated data from information indicating updating of data added to the transmission schedule and starting the receiving part;

a data storing part for storing the received data;

a storage/deletion determining part for determining whether the data is to be stored or deleted from the received download data control data;

a data display part for accepting the received data and displaying desired data;

a data deleting part for deleting data from the data storing part, the data determined to be deleted by the storage/deletion determining part; and

a data presentation period determining part for determining whether data can be displayed or not on the basis of a data presentation period and present time at the time of displaying data, and

wherein said presetting part presets reception in the receiving part on the basis of the transmission schedule stored in the transmission schedule storing part, the display part calls and displays contents from said data storing part, and

said data receiving apparatus further comprises a

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monitoring part, when download data control data indicative of operation information of download data in a receiving apparatus for receiving data from said transmitting apparatus in which module number data indicative of the number of data received by said receiving apparatus is 0 is received, for monitoring whether or not data corresponding to said module number data is received or not, and a data deleting part, if the data is not received, for deleting data of a directory for managing data in said receiving apparatus, which corresponds to said module number data.